

In the Claims

The following Listing of Claims replaces all prior versions in the application:

LISTING OF CLAIMS

1. (Currently amended) A process for deterministic transmission of asynchronous data in packets issued by acquisition and processing systems, in the field of data acquisition and telemetry of testing installations, comprising the following steps:
 - storing data arriving asynchronously in FIFO registers,
 - packetizing data from said FIFO registers in a first set of packets, in a first packetizing cycle, according to a predetermined order with sorting and enhancement of these datas, in multiple packetizing modules,
 - after sending of a request by a message composition module, ending said first packetizing cycle in said packetizing modules,
 - forwarding said first set of packets, regardless the state of completion of the first packetizing cycle, to said message composition module, beginning a second packetizing cycle for a second set of packets,
 - recovering said first set of packets by the message composition module, one packet after the other in a predefined order, to form a first message,
 - setting the first message in electrical format, in a formatting module, in a protocol used for the transmission to form an output message,
 - outputting said output message, by the output module on a transmission line, said method allowing ~~synchronizing~~ synchronization of the start and end of packets in relation to their transmission in the output message.
2. (Previously presented) A device for deterministic transmission of asynchronous data in packets issued by acquisition and processing systems, in the field of data acquisition and telemetry of testing installations, said device comprising:
 - at least one input module receiving said asynchronous data,
 - a plurality FIFO registers configured to receive data from the at least one input module;
 - a plurality of packetizing modules connected to said FIFO registers,

at least one control module for FIFO register dump, monitored by at least one packeting module of said plurality of packeting modules,

a message composition module receiving the outputs of said plurality of packeting modules for composing a message therefrom, said message composition module configured to control the packeting cycle in sending to each of said plurality of packeting modules an order to terminate a packet assembly procedure regardless of whether said packet assembly procedure is completed,

a packet formatting module configured to format said message from said message composition module, and

an output module configured to transmit said message on a transmission line.

3. (Previously presented) The process of claim 1, further comprising conducting data acquisition and real-time processing for test installations of new aeroplanes.